8991/0000095

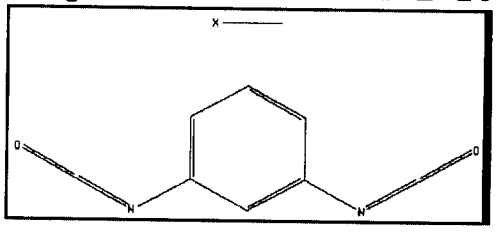
Contains No CBI

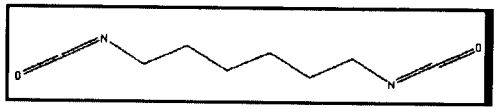
PDCN: 89200004614

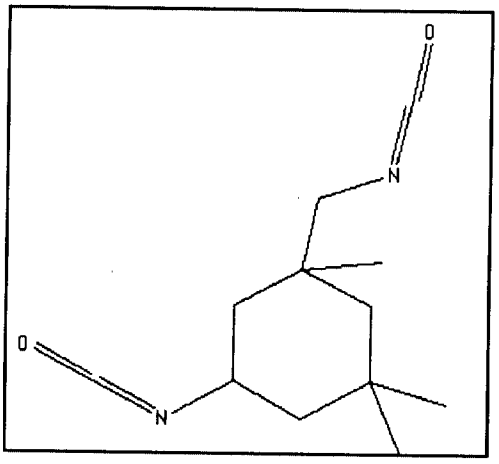
8EHQ-0892-5968 A

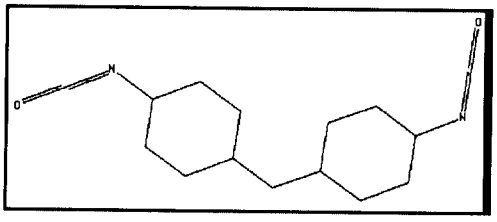
Company Name: Miles Inc.
Submission Dated: August 3, 1992

Chemical Name:	**CAS Number:**
Toluenediisocyanate (TDI)	26471-62-5
Hexamethylenediisocyanate (HDI)	822-06-0
Isophorondiisocyanate (IPDI)	4098-71-9
3,3'-dimethyl-4,4'-diisocyanatodicyclo-hexylmethane (MCDI)	5124-30-1
Polymeric HDI mixture	28182-81-2
Polymeric MDI mixture	9016-87-9
Desmodur L 67	Unknown
Desmophen 800	Unknown
VP-L 2292	Unknown
Desmodur HL	Unknown
Desmodur VP-HTMP	Unknown
Desmodur N 75	Unknown
Desmodur VP KL-5-2333	Unknown
Desmophen 650	30525-36-1
Desmodur VP-KL-5-2335	Unknown
Desmophen VP-KL-5-2331	Unknown
Desmodur E 3260	Unknown
Desmodur EIJ 1676 E	Unknown
Basonat 8423	Unknown
Desmodur VP-L 2267	Unknown
Desmodur VL	Unknown
Desmophen RD 181	Unknown
Desmophen VP-KL-2292	Unknown
Alkydal R 35	Unknown
Setalux C 1121 BX	Unknown
Setamin US 133 BX	Unknown
Duracryl-Clear - DCA 468	Unknown
Acrylic lacquer Clear L 67-type 5 x 149815-A	Unknown
Epikote 1001/Epikure V 670	None
NAD clear automotive Type II	Unknown
Acrylic enamel clear E 14 Type 5 x 149815-B	Unknown









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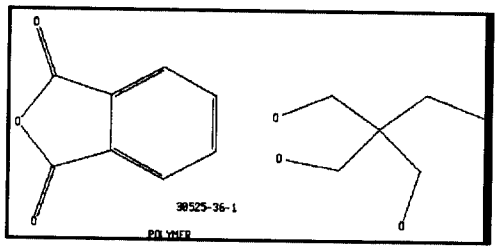

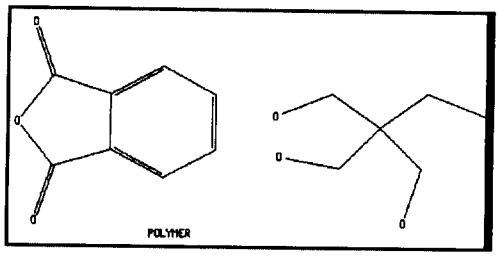

STUDY DESIGN AND RESULTS:

1. Acute Inhalation Toxicity Study with TDI in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 66, 70, 174, 207, 332, 634, 708, or 917 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 350 and 360 mg/m^3 for male and female rats, respectively. Death occurred within 1-24 days.
- Toxic signs observed included labored breathing.
- At gross necropsy lung edema and pneumonia were observed.

2. Acute Inhalation Toxicity Study with HDI in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 105, 143, 259, 341, 383, 443, 575, 589, or 719 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 310 and 350 mg/m^3 for male and female rats, respectively. Death occurred within 1-20 days.
- Toxic signs observed included labored breathing.
- At gross necropsy, lung edema and pneumonia were observed.

3. Acute Inhalation Toxicity Study with IPDI in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 62, 72, 131, 200, 211, or 285 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 160 and 135 mg/m^3 for male and female rats, respectively. Death occurred within 1-14 days.
- Toxic signs observed included labored breathing.
- At gross necropsy, lung edema and pneumonia were observed.

4. Acute Inhalation Toxicity Study with MCDI in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 248, 335, 385, 748, 1001, or 1611 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 554 and 542 mg/m^3 for male and female

rats, respectively. Death occurred within 1-5 days.
- Toxic signs observed included labored breathing.
- At gross necropsy, lung edema and pneumonia were observed.

5. Acute Inhalation Toxicity Study with Desmodur L 67 Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1299, 3034, or 3820 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 3820 and 3820 mg/m^3 for male and female rats, respectively. Death occurred within 1-7 days.
- Toxic signs observed were a decrease of general well-being.
- At gross necropsy, lung inconspicuous.

6. Acute Inhalation Toxicity Study with Desmodur L 67 + Desmophen 800 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1646, 2266, or 3752 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 3752 for both male and female rats. Death occurred within 1-7 days.
- Toxic signs observed included temporary labored breathing.
- At gross necropsy, low-degree lung edema was observed.

7. Acute Inhalation Toxicity Study with VP-L 2292 + Desmodur L 67 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1747 or 2195 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 2195 mg/m^3 for both male and female rats. Death occurred within 1-14 days.
- Toxic signs observed included temporary labored breathing.
- At gross necropsy, low-degree lung edema was observed.

8. Acute Inhalation Toxicity Study with Desmodur IL in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1136, 1537, or 2462 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 2462 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included a decrease of general well-being.
- At gross necropsy, low-degree pneumonic changes were observed.

9. Acute Inhalation Toxicity Study with Desmodur HL in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1526 or 3003 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 3003 mg/m^3 for both male and female

rats. No deaths occurred.
- Toxic signs observed included a decrease of general well-being.
- At gross necropsy, low-degree pneumonic changes were observed.

10. Acute Inhalation Toxicity Study with Desmodur VP-HTMP in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 126, 165, 366, 469, 711, or 1742 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 500 mg/m^3 for both male and female rats. Death occurred within 24 hours.
- Toxic signs observed included labored breathing.
- At gross necropsy, lung edema was observed.

11. Acute Inhalation Toxicity Study with Desmodur N 75 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 230, 259, 351, 408, or 791 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 425 and 400 mg/m^3 for male and female rats, respectively. Death occurred within 1-7 days.
- Toxic signs observed included labored breathing.
- At gross necropsy, lung edema and pneumonia were observed.

12. Acute Inhalation Toxicity Study with EIJ 1660 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 154, 172, 265, 465, 568, or 750 mg/m^3 for 4 hours and were then observed for 4 weeks. The animals were not dissected.
- The LC_{50} values were 310 and 335 mg/m^3 for male and female rats, respectively. Death occurred within 1-7 days.
- Toxic signs observed included labored breathing.

13. Acute Inhalation Toxicity Study with Desmodur N 75 + Desmophen 650 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 302, 541, 607, 1081, or 2068 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 760 and 800 mg/m^3 for male and female rats, respectively. Death occurred within 24 hours.
- Toxic signs observed included temporary labored breathing.

14. Acute Inhalation Toxicity Study with Desmodur N 75 - VP 1 2292 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 370, 614, 744, 1249, 1800, or 2064 mg/m^3 for 4 hours and were then observed for 4

weeks. The animals were not dissected.
- The LC_{50} values were 1250 mg/m^3 for both male and female rats. Death occurred within 1-7 days.
- Toxic signs observed included labored breathing.

15. Acute Inhalation Toxicity Study with Desmodur VP-KL-5-2335 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 129, 156, 184, 403, 629, 684, 1010, or 1947 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 620 and 550 mg/m^3 for male and female rats, respectively. Death occurred within 1-7 days.
- Toxic signs observed included labored breathing.
- At gross necropsy, lung edema was observed.

16. Acute Inhalation Toxicity Study with Desmodur VP-KL-5-2335 + Desmophen VP-KL-5-2331 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 498, 913, 1322, or 2172 mg/m^3 for 4 hours and were then observed for 4 weeks. The animals were not dissected.
- The LC_{50} values were about 1550 and 2000 mg/m^3 for male and female rats, respectively. Death occurred within 24 hours.
- Toxic signs observed included labored breathing.

17. Acute Inhalation Toxicity Study with Desmodur HL in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1526 or 3003 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 3003 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included a decreased general well-being.
- At gross necropsy, slight pneumonic changes were observed.

18. Acute Inhalation Toxicity Study with Desmodur E 3260 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 177, 237, 689, 1140, or 1759 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 943 and about 1150 mg/m^3 for male and female rats, respectively. Death occurred within 1-4 days.
- Toxic signs observed included labored breathing.
- At gross necropsy, lung edema and pneumonia were observed.

19. Acute Inhalation Toxicity Study with Desmodur EIJ 1676 E in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 115, 148, 202, 258,

363, 485, or 669 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 369 and 268 mg/m^3 for male and female rats, respectively. Death occurred within 24 hours.
- Toxic signs observed included extremely labored breathing.
- At gross necropsy, lung edema and pneumonia were observed.

20. Acute Inhalation Toxicity Study with Basonat 8423 in Rats (Final Report)
- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 511, 688, 725, 764, 1014, or 1216 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 778 and 794 mg/m^3 for male and female rats, respectively. Death occurred within 1-4 days.
- Toxic signs observed included extremely labored breathing.
- At gross necropsy, lung edema and pneumonia were observed.

21. Acute Inhalation Toxicity Study with Desmodur VP-L 2267 in Rats (Final Report)
- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 3313, 4911, or 5362 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 5362 mg/m^3 for both male and female rats. Death occurred within 24 hours.
- Toxic signs observed included short-term labored breathing.

22. Acute Inhalation Toxicity Study with Desmodur VL in Rats (Final Report)
- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 113, 234, 324, 400, 486, or 937 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 369 and 380 mg/m^3 for male and female rats, respectively. Death occurred within 1-3 days.
- Toxic signs observed included labored breathing.
- At gross necropsy, lung edema was observed.

23. Acute Inhalation Toxicity Study with Desmophen RD 181 in Rats (Final Report)
- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1538 or 2472 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 2472 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included a decreased general well-being.
- At gross necropsy, slight pneumonic changes were observed.

24. Acute Inhalation Toxicity Study with Desmophen VP-KL-5-2292 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1277 or 2002 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 2002 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included a decreased general well-being.

25. Acute Inhalation Toxicity Study with Desmophen 650 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1117 or 1919 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 1919 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included a decreased general well-being.

26. Acute Inhalation Toxicity Study with Alkydal R 35 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1347, 2230, 2520, or 3635 mg/m^3 for 4 hours and were then observed for 4 weeks. The animals were not dissected.
- The LC_{50} values were 3625 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included short-term labored breathing.

27. Acute Inhalation Toxicity Study with Acrylic Coating Setalux-Setamin in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1135, 1222, 1514, 1804, 2029, 2382, or 3476 mg/m^3 for 4 hours and were then observed for 4 weeks. The animals were not dissected.
- The LC_{50} values were 1944 and 2610 mg/m^3 for male and female rats, respectively. Death occurred within 24 hours.
- Toxic signs observed included short-term labored breathing and dizziness.

28. Acute Inhalation Toxicity Study with Daracryl Clear-DCA 468 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 805 or 1233 mg/m^3 for 4 hours and were then observed for 4 weeks. The animals were not dissected.
- The LC_{50} values were 1233 mg/m^3 for both male and female rats. Deaths occurred within 24 hours.
- Toxic signs observed included short-term labored breathing.

29. Acute Inhalation Toxicity Study with Acrylic Lacquer Clear L 67 Type in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 536, 1166, or 1357 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 1357 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included short-term labored breathing and dizziness.

30. Acute Inhalation Toxicity Study with Epikote 1001/Epikure V 670 in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 2042 or 3375 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 3375 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included short-term labored breathing.

31. Acute Inhalation Toxicity Study with NAD Clear Automotive in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 269, 505, or 1009 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 1009 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included short-term labored breathing.

32. Acute Inhalation Toxicity Study with Acrylic Enamel Clear E in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 1330 or 1694 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 1694 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included a decreased general well-being.

33. Acute Inhalation Toxicity Study with Acrylic Enamel Clear E in Rats (Final Report)

- Wistar II albino rats (10/sex/group) were exposed to the test material at air concentrations of 6690 or 8860 mg/m^3 for 4 hours and were then observed for 4 weeks.
- The LC_{50} values were 8860 mg/m^3 for both male and female rats. No deaths occurred.
- Toxic signs observed included short-term sedative effect.

VOLUNTARY ACTIONS INDICATED: None